



Indoor Air Quality Monitor

September 2002



North Dakota Department of Health

Eye on Events

IAQ Conference

The University of Minnesota eighth annual indoor air quality workshop will be at the Radisson Hotel Metrodome in Minneapolis, Minn., on Sept. 16 and 17, 2002. The focus will be on health care facility construction and indoor air quality. For more information visit: <http://www.dehs.umn.edu/iaqconf.html> or call 612.624.4754.

Healthy Homes Conference

The city of Minneapolis is sponsoring the North Central Regional Conference on Mold, Lead, Healthy Homes and Children's Environmental Health. The conference will be held in Minneapolis, Minn., Oct. 22 through Oct. 24, 2002. Pre-conference workshops will be held October 21. For more information, call 612.673.3533.

October Is Home Indoor Air Quality Month

Governor John Hoeven has proclaimed October 2002 as *Home Indoor Air Quality Month* in North Dakota. The event is held to encourage North Dakotans to learn about indoor air quality issues.

"People spend as much as 90 percent of their time indoors," said David Glatt, chief of the North Dakota Department of Health's Environmental Health Section. "Because we spend most of our time inside, maintaining good indoor air quality benefits every North Dakotan."

Many factors negatively affect the quality of the air we breathe, including radon, carbon monoxide, secondhand tobacco smoke, lead dust, asbestos, and even certain household products. Because of poor indoor air quality, many North Dakotans suffer chronic and acute health effects and economic burden.

Exposure to secondhand smoke is a major cause of illness among children. Many children in North Dakota are at increased risk of illness or death because of exposure to secondhand smoke in the



October is Home Indoor Air Quality Month

home. Secondhand smoke can lead to asthma, ear infections and lung cancer.

Asthma, the leading chronic childhood illness in the United States, can be aggravated by exposure to dust, tobacco smoke, pollen and allergens from mold, animals, plants and insects. Asthma is the leading cause of school absenteeism due to chronic illness. Nationally, asthma kills 4,000 people a year, and the majority of asthma-related deaths occur to children.

Radon is the second-leading cause of lung cancer in the United States. In North Dakota, elevated radon levels have been found in more than 60 percent of homes tested for radon. For that reason, every home in North Dakota should be tested for radon, and action should be taken to reduce radon in homes that have tested high.

Childhood lead poisoning remains a major preventable environmental health problem in the United States.

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The U.S. Centers for Disease Control and Prevention estimates that 890,000 children ages 1 to 5 have elevated blood-lead levels. Major sources of lead exposure include deteriorated paint in older housing and lead contaminated dust and soil.

Every year, 500 Americans die in their homes due to carbon monoxide poisoning. To guard against carbon monoxide buildup in a home, North Dakotans are advised to do the following: inspect and clean furnaces, clean out chimneys and flues, never use ovens or stoves to heat a home, and install carbon

monoxide detectors.

For more information about indoor air quality and its effects on health, contact Jesse Green, North Dakota Department of Health, at 701.328.5188. Additional information may be found on the department's website at www.health.state.nd.us.

NEHA 2002 Indoor Air Quality Conference

The National Environmental Health Association (NEHA) 2002 Indoor Air Quality Conference was held in Minneapolis, Minn., June 30 through July 2, 2002. The Indoor Air Quality Conference focused on the growing indoor air quality issue of mold and moisture in indoor environments. Other topics included ventilation, radon mitigation and indoor environmental tobacco smoke.

The speakers at the conference ranged from employees of government agencies to construction engineers, architects, environmental consultants and representatives from the hospitality industry.

The fact that the face of indoor air quality is changing was discussed at the conference. Indoor air quality used to mean strictly a ventilation issue, but has now expanded into a menagerie of issues each with its own complexity. Ventilation, though, is still of high importance in indoor air quality. In fact, the National Institute for Occupational Safety and Health (NIOSH) indicates that one-half of indoor air quality complaints are related to ventilation deficiencies.

The issue of indoor mold growth has now taken center stage. Mold has blossomed into the leading indoor air quality issue in part because of recent civil litigation and heightened media coverage.

The topic of health effects from exposure to mold-related particles produced some good discussions. There is evidence showing a correlation between exposure to mold-related particles and allergic reactions. However, the

jury is still out concerning the toxic effects of exposure to airborne mold-related particles. The consensus at the conference was that more research is needed in this area.

The topic of environmental sampling for mold generated some debate. Some conference attendees felt that sampling was a necessary part of an investigation, while others felt that it was only needed in some cases.



Regardless of how one felt about sampling for mold growth, there was a consensus that indoor mold growth needed to be prevented and, if found, needed to be properly cleaned up.

Evidence of the effectiveness of radon mitigation systems was presented. One side

benefit of radon mitigation systems was that there is evidence which suggests they are effective in reducing indoor moisture content in the air. This information is important because controlling relative humidity indoors is essential to preventing mold growth.

In addition to the presentations and discussions, the conference also was host to many exhibitors and vendors. There were a wide variety of exhibitors present at the conference – from environmental consultant companies, analytical laboratory services and equipment manufacturers to silk ties with bioaerosol patterns such as anthrax and dust mites.

North Dakota was well represented at the conference. Attendees from North Dakota included Allen McKay, Lake Region District Health Unit; Keith Johnson and Vawnita Best, Custer Health Unit; Terry Ludlum, Fargo-Cass Public Health; and Jesse Green, North Dakota Department of Health.

IAQ Colleague



Gene Gafkjen, EHP, Upper Missouri District Health Unit

This issue's IAQ colleague is Norman (Gene) E. Gafkjen, environmental health practitioner at Upper Missouri District Health Unit (UMDHU).

Gene received a degree in geology from the University of North Dakota. He was born in Williston, N. D., and except for the brief move to Grand Forks to go to college, he has lived in the Williston area all his life.

Gene grew up working on a farm located near Williston. In 1987 he found himself taking over farm until just a short time ago, when circumstances made him move on.

"Giving up the farm was one of the toughest decisions I have faced," Gene said.

Now, he is excited to be at UMDHU and looks forward to meeting other health professionals, learning more about environmental health and helping the public.

Away from work, Gene enjoys the outdoor hobbies of hunting, fishing and camping.

Tool Talk: Indoor Air Quality Equipment Review

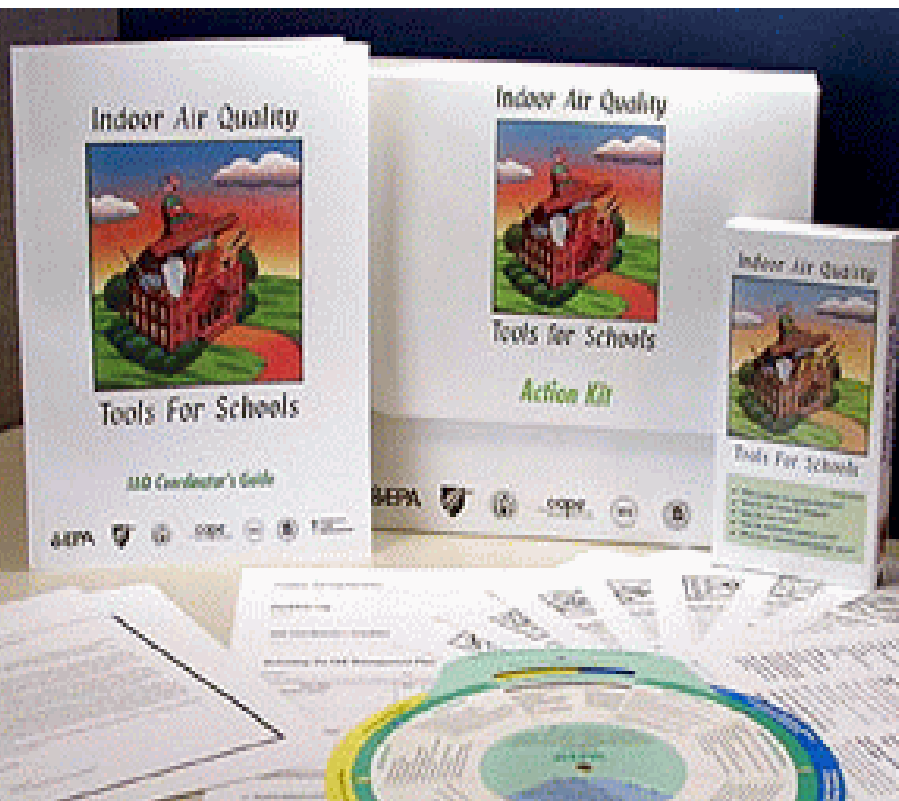
One invaluable indoor air quality tool for schools is the U. S. EPA's Indoor Air Quality Tools for Schools Action Kit. The kit contains the essentials that schools or school districts need for developing a comprehensive indoor air quality management program.

Though the kit was designed for schools, facility managers of other types of large buildings easily can apply the action kit to their buildings to address and prevent potential indoor air quality problems.

The Tools for Schools Action Kit is a one-stop resource for school and large building indoor air quality. With the kit, schools will develop a better understanding of the various factors involved in indoor air quality and how to prevent and address indoor air quality problems.

The information in the kit and the implementation of the program will help raise the awareness of building occupants about indoor air quality and will educate occupants about what they can do to help maintain good indoor air quality in the building.

Schools and other large building are complex environments, often with a wide variety of potential indoor air quality pollutant sources. One key step in indoor air quality is identifying pollutant sources. The kit includes pollutant source checklists that can help identify potential indoor air quality pollutant sources.



U.S. EPA Indoor Air Quality Tools for Schools Kit

Schools and other large buildings can have large mechanical systems such as heating, ventilation, and air conditioning (HVAC) units that can have a direct impact on indoor air quality. The Tools for Schools kit includes information about pollutant pathways and how building systems can play a role in maintaining good indoor air quality.

The kit includes checklists for school employees, a flexible step-by-step guide for coordinating the checklists, an indoor air quality problem solving wheel, a fact sheet about indoor air pollution issues, and sample policies

and memos. In addition to the kit, the EPA, in conjunction with the cast and crew of the popular television series *This Old House*, has produced a short video about how to properly operate and maintain school ventilation systems.

The Tools for Schools Kit was designed with tight budgets in mind, using the current staff in a building to help identify, prevent and solve indoor air quality issues. To acquire your free Tools for Schools Action Kit visit the U.S. EPA website at <http://www.epa.gov/iaq/schools/tools4s2.html> or call the U.S. EPA at 1.800.4384318.

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Questions? Comments? Suggestions? Something to add to the next issue? Call Jesse Green at 701.328.5188